

### REMARKS

Applicants thank the Examiner for the personal interview held on April 13, 2004.

Claims 1-20, 23-30, 34, 35, 38-90, 93-97, 101-112, 116-122, 124, 125, and 127-129 are pending in this application. By this amendment, claims 1, 34, 38, 62, 87, 108, 119, and 127 are amended. Support for the amendments can be found at least on page 32, lines 3-11 of the specification. No new matter is introduced. Reconsideration and prompt allowance of the claims is respectfully requested.

### **Priority**

This application is a continuation of application serial number 08/912,934, filed August 15, 1997 (now U.S. Patent No. 6,539,548), which is a continuation of application serial number 08/160,282 filed December 2, 1993 (now U.S. Patent No. 5,659,350). The Office Action alleges that the instant application adds and claims additional disclosure not presented in the prior application. Applicants respectfully submit that all the pending claims are supported by the parent application No. 08/160,282, and the applications incorporated by reference, all of which were also filed on December 2, 1993 (page 1, line 15-25).

With regard to the support for the limitation in claim 117, Applicants respectfully submit that the limitation "wherein the subscription includes on line services" is supported by US Patent No. 5,734,853 (the '853 patent), which was incorporated by reference (page 1, lines 20-21). The '853 patent provides, at column 4, lines 22-31, that:

In addition to menu information, the set top terminal may also store text transmitted from the cable headend or the operations center. The text may inform the subscriber about upcoming events, billing and account status, new subscriptions, or other relevant information. The text will be stored in an appropriate memory location depending on the frequency and the duration of the use of the textual message. The set top terminal can also support on-line data base services, interactive multi-media services, access to digital radio channels, and other services (emphasis added).

In addition, the limitation of claim 117 is also supported by the parent application, i.e., US Patent Application No. 08/160,282, now US Patent No. 5,659,350 (the '350 patent). The '350 patent provides, at column 11, lines 55-63 and column 16, lines 35-44, that:

Also, optional upgrades are available to enhance the performance of a subscriber's set top terminal 220. These upgrades may consist of a cartridge or computer card (not shown) that is inserted into an expansion slot in the set top terminal 220 or may consist of a feature offered by the

cable headend 208 or operations center 202 to which the user may subscribe. Available upgrades may include on line data base services, interactive multi-media services, access to digital radio channels, and other services (emphasis added).

.....

The purpose of the EIS is to provide an on-line software tool that will allow for real-time evaluation of current product positioning. The design of the system consists of user friendly icons to guide the user through available functions. The functionality in the system provides general information on current programming sales status. By working through the tiers in the system, the user has access to more specific information. The system is designed to shield the user from a long learning curve and information overload (emphasis added).

With regard to the support for the limitation in claim 118, Applicants respectfully submit that the limitation "wherein the subscription includes data services" is supported by the parent application, i.e., the '350 patent. The '350 patent provides, at column 31, lines 1-11, that:

Mini pays 310 are channels to which existing set top converter boxes (not shown) and the set top terminals 220 of the present invention may subscribe. The subscriptions for mini pays 310 may be daily, weekly, or monthly. An example would be the Science Fiction channel. Data services 312 are services in which information is interactively presented to the subscriber using a modem or other high rate of speed data transfer. Some examples are Prodigy, services for airline reservations, and TV guide services (e.g. TV Guide X\*PRESS.TM., InSight.TM., etc.). Data could also include classified or other forms of advertising (emphasis added).

Accordingly, Applicants respectfully submit that the present application complies with 35 U.S.C. § 120 and 37 C.F.R. § 1.78 and that the priority claim of December 2, 1993 is proper. Reconsideration of the priority of all pending claims is respectfully requested.

### **35 U.S.C. § 103 Rejections**

Claims 1, 3-6, 10-18, 20, 23, 27-33, 38, 43-45, 51-56, 60-64, 66-67, 69-80, 83-85, 89-90, 93-97, 102-112, 116-122, and 124-129 are rejected under 35 U.S.C. §103 (a) as being anticipated by U.S. Patent 5,477,262 to Banker et al. (hereafter Banker) in view of U.S. Patent 5,479,266 to Young et al. (hereafter Young) and further in view of U.S. Patent 5,075,771 to Hashimoto (hereafter Hashimoto). The Examiner admits on page 5 of the Office Action that Banker is silent on using a heuristic to determine the content of a menu. However, the Examiner asserts on page 2 and page 5 of the Office Action that Hashimoto teaches using a heuristic at column 7, lines 20-

62. Specifically, the Examiner asserts that "Hashimoto teaches a  $Pc(j)$  term which is a coefficient calculated through a feed back from subscribers, which is serving as a problem-solving technique by experimental techniques that changes with user input. As best determined by the examiner by means of the applicant's specification, Hashimoto teaches a heuristic." This rejection is respectfully traversed.

Claim 126 has been cancelled in the previous response, and the rejection of claim 126 is moot.

Banker is directed to a method and apparatus for providing an on-screen user-friendly interface for a subscription television terminal. Young is directed to a user interface for a television schedule system. Hashimoto is directed to a method of and apparatus for optimal scheduling of television programming to maximize customer satisfaction. Hashimoto discloses at column 7, lines 20-62, a method for using linear programming to conduct evaluation of individual taste and television programs. Specifically, Hashimoto recites at column 7, lines 49-61:

The coefficient  $Pc(j)$  is decided commonly on all the human beings. In the value of  $Pc(j)$ , feedback is practiced by an accumulation of a claim from the subscribers as ... The coefficient  $Pc(j)$  is decided as the common value between human beings, and also the value of  $Pc(j)$  is calculated more correctly doing a feed back (study) by an accumulation of a claim from the subscribers."

However, Hashimoto's feed back study does not lead to menu generation, let alone automated menu generation by an operations center. Furthermore, Hashimoto's study does not filter television programs into a database containing program names. Nor does Hashimoto's study index the television programs by a number of times each program is purchased. Additionally, Hashimoto does not provide menu information relating to the filtering and indexing to terminals using a television delivery system.

To the contrary, amended independent claim 1 recites "the menu information is generated automatically by an operations center by analyzing the programming packaging using a heuristic thereby filtering and indexing the programming for display, and wherein the programming is filtered into a database containing program names and indexed by a number of times each program is purchased ... providing the menu information including the database containing program names to terminals using the television delivery system," (emphasis added). Claim 1 is amended to more precisely define the use of heuristics to generate menu information. Using

heuristics to generate menu information is described in the present application at page 32, lines 3-11 as follows:

One heuristic, for example, is that when a show is not ordered frequently, it is moved closer to the top of the menu for greater visibility. The filtering of the program data allows it to be sorted and indexed for display to the user. The program data may be filtered into a new database containing program names and indexed by the number of times each program was purchased. The program data may also be indexed by buy times and program categories (emphasis added).

Banker, Young, and Hashimoto, individually and in combination, do not disclose or suggest this feature recited in amended claim 1. Therefore, amended claim 1 is allowable.

Claims 3-6, 10-20, and 27-30 are allowable because they depend from allowable claim 1 and for the additional features they recite. Withdrawal of the rejection of claims 1, 3-6, 10-20, and 27-30 under 35 U.S.C. §103 (a) is respectfully requested.

With respect to independent claim 38, for at least the same reason as noted above with respect to claim 1, Banker, Young, and Hashimoto, individually and in combination, do not disclose or suggest “the menu information is generated automatically by an operations center by analyzing the programming packaging using a heuristic thereby filtering and indexing the programming packaging for display, and wherein the programming packaging is filtered into a database containing program names and indexed by a buy time and program categories ... providing the menu data including the database containing program names to a terminal in the broadcast television system,” as recited in amended claim 38 (emphasis added). Therefore, amended claim 38 is allowable.

Claims 39, 43-45, 52-56, and 60 are allowable because they depend from allowable claim 38 and for the additional features they recite. Withdrawal of the rejection of claims 38-39, 43-45, 52-56, and 60 under 35 U.S.C. §103 (a) is respectfully requested.

With respect to independent claim 62, for at least the same reason as noted above with respect to claim 1, Banker, Young, and Hashimoto, individually and in combination, do not disclose or suggest “the menu information is generated automatically by an operations center by analyzing the programming using a heuristic thereby filtering and indexing the programming for display, and wherein the programming is filtered into a database containing program names and indexed by a number of times each program is purchased ... wherein the menu information including the database containing program names are provided to the terminal using the

television delivery system,” as recited in amended claim 62 (emphasis added). Therefore, amended claim 62 is allowable.

Claims 63-67, 69-80, and 83-85 are allowable because they depend from allowable claim 62 and for the additional features they recite. Withdrawal of the rejection of claims 62, 63-67, 69-80, and 83-85 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 89-90, 93-97, and 102-107 are allowable because they depend from allowable claim 87 (as discussed later) and for the additional features they recite. Withdrawal of the rejection of claims 89-90, 93-97, and 102-107 under 35 U.S.C. §103 (a) is respectfully requested.

With respect to independent claim 108, for at least the same reason as noted above with respect to claim 1, Banker, Young, and Hashimoto, individually and in combination, do not disclose or suggest “the menu information is generated automatically by an operations center by analyzing the programs using a heuristic thereby filtering and indexing the programs for display, wherein the programs are filtered into a database containing program names and indexed by a buy time and program categories, and wherein the menu information including the database containing program names are provided to terminals using a television delivery system,” as recited in amended claim 108 (emphasis added). Therefore, amended claim 108 is allowable.

Claims 109-112 and 116-118 are allowable because they depend from allowable claim 108 and for the additional features they recite. Withdrawal of the rejection of claims 108-112 and 116-118 under 35 U.S.C. §103 (a) is respectfully requested.

In addition, with respect to claims 117 and 118, Applicants respectfully contend that the Examiner has made improper use of the doctrine of Official Notice and traverse this rejection. Pursuant to M.P.E.P. §2144.03, Applicants respectfully request that the Examiner produce a valid and relevant prior art reference showing the recited limitation, where it must be obvious for one of ordinary skill in the art to combine the references. If a reference cannot be produced, Applicants respectfully request that Claims 117 and 118 be allowed to issue.

With respect to independent claim 119, for at least the same reason as noted above with respect to claim 1, Banker, Young, and Hashimoto, individually and in combination, do not disclose or suggest “the menu information is generated automatically by an operations center by analyzing the programs using a heuristic thereby filtering and indexing the programs for display, wherein the programs are filtered into a database containing program names and indexed by a number of times each program is purchased, and wherein the menu information including the

database containing program names are provided to terminals using a television delivery system,” as recited in amended claim 119 (emphasis added). Therefore, amended claim 119 is allowable.

Claims 120-122 and 124-126 are allowable because they depend from allowable claim 119 and for the additional features they recite. Withdrawal of the rejection of claims 119-122 and 124-126 under 35 U.S.C. §103 (a) is respectfully requested.

With respect to independent claim 127, for at least the same reason as noted above with respect to claim 1, Banker, Young, and Hashimoto, individually and in combination, do not disclose or suggest “the menu information is generated automatically by an operations center by analyzing the programs using a heuristic thereby filtering and indexing the programs for display, and wherein the television programs are filtered into a database containing program names and indexed by a number of times each program is purchased ... providing the menu information including the database containing program names to terminals using a television delivery system,” as recited in amended claim 127 (emphasis added). Therefore, amended claim 127 is allowable.

Claims 128-129 are allowable because they depend from allowable claim 127 and for the additional features they recite. Withdrawal of the rejection of claims 127-129 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 2, 46-51, 57, 61, and 65 are rejected under 35 U.S.C. §103 (a) as being anticipated by Banker in view of Young and further in view of Hashimoto and U.S. Patent 5,001,554 to Johnson et al (hereafter Johnson). This rejection is respectfully traversed.

Claim 2 is allowable because it depends from allowable claim 1 and for the additional features it recites. Withdrawal of the rejection of claim 2 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 46-51, 57, and 61 are allowable because they depend from allowable claim 38 and for the additional features they recite. Withdrawal of the rejection of claims 46-51, 57, and 61 under 35 U.S.C. §103 (a) is respectfully requested.

Claim 65 is allowable because it depends from allowable claim 62 and for the additional features it recites. Withdrawal of the rejection of claim 65 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 58-60 are rejected under 35 U.S.C. §103 (a) as being anticipated by Banker in view of Young and further in view of Hashimoto, Johnson and U.S. Patent 5,367,330 to Haave et al (hereafter Haave). This rejection is respectfully traversed.

Claims 58-60 are allowable because they depend from allowable claim 38 and for the additional features they recite. Withdrawal of the rejection of claims 58-60 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 7-9, 34, 35, 40-42, 58, 68, 86-90, 93-97, and 101-107 are rejected under 35 U.S.C. §103 (a) as being anticipated by Banker in view of Young and further in view of Hashimoto and Haave. This rejection is respectfully traversed.

Haave is directed to a method and apparatus for controlling and delivering television programming from a control station to one or more substations. Haave does not disclose or suggest the feature of using heuristics for automated menu generation.

Claims 7-9 and 34-35 are allowable because they depend from allowable claim 1 and for the additional features they recite. Withdrawal of the rejection of claims 7-9 and 34-35 under 35 U.S.C. §103 (a) is respectfully requested.

With respect to independent claim 34, for at least the same reason as noted above with respect to claim 1, Banker, Young, Hashimoto, and Haave, individually and in combination, do not disclose or suggest "the menu information is generated automatically by an operations center by analyzing the program line-up information using a heuristic thereby filtering and indexing the program line-up information for display, and wherein the program line-up information is filtered into a database containing program names and indexed by a number of times each program is purchased ... providing the menu data including the database containing program names to terminals," as recited in amended claim 34 (emphasis added). Therefore, amended claim 34 is allowable.

Claims 35 is allowable because it depends from allowable claim 34 and for the additional features it recites. Withdrawal of the rejection of claims 34-35 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 40-42 and 58 are allowable because they depend from allowable claim 38 and for the additional features they recite. Withdrawal of the rejection of claims 40-42 and 58 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 68 and 86 are allowable because they depend from allowable claim 62 and for the additional features they recite. Withdrawal of the rejection of claims 68 and 86 under 35 U.S.C. §103 (a) is respectfully requested.

With respect to independent claim 87, for at least the same reason as noted above with respect to claim 1, Banker, Young, Hashimoto, and Haave, individually and in combination, do not disclose or suggest "the menu information is generated automatically by an operations center by analyzing the television programs using a heuristic thereby filtering and indexing the television programs for display, wherein the television programs are filtered into a database containing program names and indexed by a number of times each program is purchased, and wherein the menu information including the database containing program names are provided to the terminal," as recited in amended claim 87 (emphasis added). Therefore, amended claim 87 is allowable.

Claims 88-90, 93-97, and 101-107 are allowable because they depend from allowable claim 87 and for the additional features they recite. Withdrawal of the rejection of claims 87-90, 93-97, and 101-107 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 24-26 and 81-82 are rejected under 35 U.S.C. §103 (a) as being anticipated by Banker in view of Young and further in view of Hashimoto and U.S. Patent 5,381,477 to Beyers, II et al (hereafter Beyers). This rejection is respectfully traversed.

Claims 24-26 are allowable because they depend from allowable claim 1 and for the additional features they recite. Withdrawal of the rejection of claims 24-26 under 35 U.S.C. §103 (a) is respectfully requested.

Claims 81-82 are allowable because they depend from allowable claim 62 and for the additional features they recite. Withdrawal of the rejection of claims 81-82 under 35 U.S.C. §103 (a) is respectfully requested.

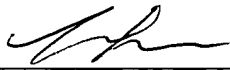
In view of the above remarks, Applicant respectfully submits that the application is in condition for allowance. Prompt examination and allowance are respectfully requested.



Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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